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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,071	07/31/2003	Ronald L. Mahany	14406US02	3942
23446	7590	01/26/2006	EXAMINER	
MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			SANTIAGO CORDERO, MARIVELISSE	
			ART UNIT	PAPER NUMBER
			2687	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/631,071

Applicant(s)

MAHANY ET AL.

Examiner

Marivelisse Santiago-Cordero

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 30-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

1. Claims 30-47 are pending.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

3. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

4. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 30-42 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 5,740,366. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following.

Regarding claim 30, claim 1 of U.S. Patent No. 5,740,366 discloses a communication network supporting wireless communication comprising:

at least one roaming wireless terminal node (col. 19, lines 63-64) selectively operable in a sleep mode and in an awake mode (col. 20, lines 4-5);

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at least one bridging node for relaying messages (col. 19, lines 65-67), the bridging node storing messages for wireless terminal nodes (col. 20, lines 9-11) and transmitting at predetermined intervals a first message that indicates the presence of pending messages (col. 20, lines 6-8), the bridging node forwarding a stored message upon request from a wireless terminal node (col. 20, lines 12-15); and

the wireless terminal node, while in a sleep mode (col. 20, line 16), wakes to listen to a first message transmitted from a bridging node to determine whether to request a pending message (col. 20, lines 17-20).

In addition, claim 1 of U.S. Patent No. 5,740,366 is more specific than claim 30 of present application.

Conflicting claims in the instant application are not patentably distinct because conflicting claims are broader and generic with respect to the applied reference claims, i.e., an obvious variation. Many decisions support the fact that a broad or generic claim is obvious from a specific claim, i.e., an obvious variation. See *In re Van Ornum and Stang*, 214 USPQ 761 (CCPA 1982); *In re Goodman* (CA FC) 29 USPQ2d 2010 (12/3/1993); *In re Vogel and Vogel*; 164 USPQ 619 (CCPA 1970); *In re Berg* (CA FC) 46 USPQ2d 1226 (3/30/1998); *Eli Lilly and Co. v. Barr Laboratories Inc.*, 58 USPQ2d 1865 (CA FC 2001). It is well settled that omission of an element and its function in a combination is an obvious expedient if the remaining elements perform the same functions as before. This notion is supported by *In re KARLSON*, 136 USPQ 184 (1963); *In re Nelson*, 95 USPQ 82 (CCPA 1952); and *In re Eliot*, 25 USPQ 11 1 (CCPA 1935).

Regarding claims 31-33, claims 2-4 of U.S. Patent No. 5,740,366 discloses every single feature further claimed (see col. 20, lines 21-36).

Regarding claim 34, claim 5 of U.S. Patent No. 5,740,366 discloses a communication network supporting wireless communication comprising:

at least one terminal node having a wireless transceiver operable in a normal state and in a power saving state (col. 20, lines 40-42);

at least one bridging node having a wireless transceiver to support communication to a terminal node (col. 20, lines 43-45), a bridging node attempting to deliver a message destined for a terminal node operating in a normal state upon receipt of the message by the bridging node (col. 20, lines 46-48) and the bridging node attempting to deliver a message destined for a terminal node operating in a power saving state by transmitting at predetermined intervals a first message identifying terminal nodes having a pending message awaiting delivery (col. 20, lines 49-55);

a terminal node operating in the power saving state synchronizing operation of its transceiver to receive the first message from a bridging node (col. 20, lines 56-59) and when the terminal node determines from the first message that it has a pending message awaiting, the terminal node directing further operation of its transceiver to receive the pending message (col. 20, lines 60-64).

In addition, claim 5 of U.S. Patent No. 5,740,366 is more specific than claim 34 of present application.

Conflicting claims in the instant application are not patentably distinct because conflicting claims are broader and generic with respect to the applied reference claims, i.e., an

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obvious variation. Many decisions support the fact that a broad or generic claim is obvious from a specific claim, i.e., an obvious variation. See *In re Van Ornum and Stang*, 214 USPQ 761 (CCPA 1982); *In re Goodman* (CA FC) 29 USPQ2d 2010 (12/3/1993); *In re Vogel and Vogel*, 164 USPQ 619 (CCPA 1970); *In re Berg* (CA FC) 46 USPQ2d 1226 (3/30/1998); *Eli Lilly and Co. v. Barr Laboratories Inc.*, 58 USPQ2d 1865 (CA FC 2001). It is well settled that omission of an element and its function in a combination is an obvious expedient if the remaining elements perform the same functions as before. This notion is supported by *In re KARLSON*, 136 USPQ 184 (1963); *In re Nelson*, 95 USPQ 82 (CCPA 1952); and *In re Eliot*, 25 USPQ 11 1 (CCPA 1935).

Regarding claims 35-42, claims 6-16 of U.S. Patent No. 5,740,366 discloses every single feature further claimed (see col. 20, line 65 through col. 21, line 40).

6. Claims 43-47 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 5 of U.S. Patent No. 5,740,366. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following.

Regarding claim 43, claim 1 of U.S. Patent No. 5,740,366 discloses a method for operating a bridging node and a roaming wireless terminal node in a communication network comprising:

storing at a bridging node pending messages (col. 20, lines 9-11); transmitting from a bridging node at predetermined intervals, a first message indicating the presence of pending messages (col. 20, lines 6-8); operating the terminal node in a sleep mode (col. 20, line 16); waking the terminal node to receive a first message (col. 20, lines 17-18); and requesting a

pending message if a pending message is determined to be stored at a bridging node for the terminal node (col. 20, lines 13-15).

Claim 1 of U.S. Patent No. 5,740,366 suggests but doesn't specifically disclose determining at the terminal node from a received first message whether a bridging node has a stored pending message for the terminal node.

However, claim 5 of U.S. Patent No. 5,740,366 discloses an analogous method to the one of claim 1 of U.S. Patent No. 5,740,366 with the feature of determining at the terminal node from a received first message whether a bridging node has a stored pending message for the terminal node (col. 20, lines 60-64).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the teachings of claim 1 of U.S. Patent No. 5,740,366 with the teachings of claim 5 of the same patent because they are suggested by the same set of claims of U.S. Patent No. 5,740,366.

Regarding claim 44, claim 1 of U.S. Patent No. 5,740,366 discloses a method for operating a roaming wireless terminal node in a communication network having at least one bridging node that transmits at predetermined intervals a first message indicating the presence of a pending message, comprising: operating in a sleep mode (col. 20, line 16); waking to receive a first message (col. 20, lines 17-18); and requesting the pending message if it is determined from the first message that there is a pending message for the terminal node (col. 20, lines 13-15).

Claim 1 of U.S. Patent No. 5,740,366 suggests but doesn't specifically disclose determining from a received first message whether there is a pending message for the terminal node. However, claim 5 of U.S. Patent No. 5,740,366 discloses an analogous method to the one

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of claim 1 of U.S. Patent No. 5,740,366 with the feature of determining from a received first message whether there is a pending message for the terminal node (col. 20, lines 60-64).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the teachings of claim 1 of U.S. Patent No. 5,740,366 with the teachings of claim 5 of the same patent because they are suggested by the same set of claims of U.S. Patent No. 5,740,366.

Regarding claim 45, claim 1 of U.S. Patent No. 5,740,366 discloses a method for operating a bridging node in a communication network for communicating with a plurality of wireless roaming terminal nodes that operate in a sleep mode and that wake to receive messages, comprising: transmitting at predetermined intervals, a first message indicating the presence of pending messages for one or more terminal nodes (col. 20, lines 6-8); receiving a request for a pending message from a terminal node (col. 20, lines 13-15); and transmitting the pending message to the terminal node in response to the received request (col. 20, lines 12-15).

Claim 1 of U.S. Patent No. 5,740,366 suggests but doesn't specifically disclose that has determined from the first message that a pending message for the terminal node is present. However, claim 5 of U.S. Patent No. 5,740,366 discloses an analogous method to the one of claim 1 of U.S. Patent No. 5,740,366 with the feature of that has determined from the first message that a pending message for the terminal node is present (col. 20, lines 60-64).

Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the teachings of claim 1 of U.S. Patent No. 5,740,366 with the teachings of claim 5 of the same patent because they are suggested by the same set of claims of U.S. Patent No. 5,740,366.



Regarding claim 46, claim 14 of U.S. Patent No. 5,740,366 discloses including storing pending messages until a predetermined number of first messages has been transmitted and delivery is unsuccessful. Note that claim 14 of U.S. Patent No. 5,740,366, which depends on independent claim 5, discloses an analogous method to the one of claim 1 of U.S. Patent No. 5,740,366; therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the teachings of claim 1 of U.S. Patent No. 5,740,366 with the teachings of claim 14 of the same patent because they are suggested by the same set of claims of U.S. Patent No. 5,740,366.

Regarding claim 47, claim 1 of U.S. Patent No. 5,740,366 discloses a method for operating a bridging node and a roaming wireless terminal node in a communication network comprising: transmitting from a bridging node at predetermined intervals, a first message indicating the presence of a pending message (col. 20, lines 6-8); operating the terminal node in a sleep mode (col. 20, line 16); waking the terminal node to receive a first message; (col. 20, lines 17-18); and requesting a pending message if a pending message for the terminal node is determined to be present (col. 20, lines 13-15).

Claim 1 of U.S. Patent No. 5,740,366 suggests but doesn't specifically disclose determining at the terminal node from a received first message the presence of a pending message for the terminal node. However, claim 5 of U.S. Patent No. 5,740,366 discloses an analogous method to the one of claim 1 of U.S. Patent No. 5,740,366 with the feature of determining at the terminal node from a received first message the presence of a pending message for the terminal node (col. 20, lines 60-64).

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Therefore, it would have been obvious to one of ordinary skill in this art at the time of invention by applicant to modify the teachings of claim 1 of U.S. Patent No. 5,740,366 with the teachings of claim 5 of the same patent because they are suggested by the same set of claims of U.S. Patent No. 5,740,366.

### *Conclusion*


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marivelisse Santiago-Cordero whose telephone number is (571) 272-7839. The examiner can normally be reached on Monday through Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MSC 1/18/06

MSC

  
**ELISEO RAMOS-FELICIANO**  
**PATENT EXAMINER**